

NOTES ON POLYGONIA J-ALBUM, CERCYONIS  
ALOPE, PHYCIODES THAROS, HEODES  
EPIXANTHE AND EUPHYDRYAS  
GILLETTI.

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*Aglais j-album watsoni*, new subspecies.

MALE: Differs from *j-album* Bdv., and Lec.; in that the ground color is a richer fulvous and the dark markings larger. This gives the insect a darker appearance than the eastern form. Under side; the whitish outer band is strongly marked at the central line of demarkation between basal and outer halves of wings, and the band fades away rather abruptly and does not reach so far towards the outer margin as it does in the original type. The whole under surface is more variegated than the type, giving an affect of greater contrast between light and dark portions.

FEMALE: Upper and upper surfaces darker than the original type, the differences not being so great as in the male.

*Polygonia j-album* was described by Boisduval and LeConte who gave New York, Philadelphia and New Harmony, Indiana, as the localities where it was to be found. It is closely related to the European *l-album* Esp. and specimens from Eastern Mongolia resemble it very much. The American specimens, however, both eastern and western, are considerably larger and there are also minor differences.

This subspecies is named after Mr. Frank E. Watson of the American Museum of Natural History in recognition of many years of aid in the entomological field.

Type, male, Fig. 1, under surface. Taken at Sicamous, British Columbia on July 28, 1921 by G. C. Hall.

Allotype, female, same date and locality as type.

Type and allotype in the American Museum of Natural History. Paratypes 1, 2, 3, 4 and 5, males and 6 and 7, females in the collection of G. C. Hall.

*Cercyonis alope ino*, new subspecies.

MALE: Upper surface of wings dark. The two usual eye spots on the fore wing black, rather small, and containing small white pupils. Hind wing uniformly dark with the exception of inconspicuous marginal lines.

Under surface of fore wing; the two usual eye-spots conspicuous with fulvous outer rings and white centers. Under surface of hind wing; rather uniform in color, but area between marginal lines and center one, slightly lighter in shade and containing two minute eye-spots at and near the anal angle.

FEMALE: Upper surface lighter shade, the two eye-spots larger, with indication of yellow outer ring. Under surface fore wing; the two eye-spots ringed with yellow and containing large bluish pupils. Basal half of wing darker than outer half. Hind wing almost uniform in color, the basal half being somewhat darker. Two small eye-spots at and near the anal angle.

This form differs from *nephele* by the more uniform markings of the under surface, especially that of the hind wings, which in *ino* is to a large degree concolorous. Certain specimens present a hind wing without the slightest indication of the six spots and practically without any markings. In all cases the transverse striations are quite inconspicuous.

W. H. Edwards described *olympus* as the form found from Illinois to the eastern slopes of the Rocky Mts. *Ino* differs from *olympus* as markedly as it does from *nephele* which is found along the southern boundary of Canada to the eastern seaboard.

Type, male, Fig. 2, under surface. Taken at Calgary, Alberta, Aug., 1921.

Allotype, female, Fig. 3, under surface. Taken at Calgary on the same date.

Paratypes 1, 2, and 3, males and 4 and 5, females from Calgary. Paratypes 6, 7, and 8, males and 9 and 10, females taken at Starblanket, Saskatchewan by H. Hutchinson. All in the collection of G. C. Hall.

Type and allotype in the American Museum of Natural History.

**Phyciodes tharos pascoensis**, Wright, form vern. *herse*, new.

*Pascoensis* was figured by Wright in his Butterflies of the West Coast and is the western representative of *tharos*. *Herse* is the Spring form of *Pascoensis* and corresponds to the eastern *marcia* Edw., differing from the summer forms by the darker markings, especially those on the under surface of the hind wing.

Type, female, taken at Taft, British Columbia on July 29, 1921 by G. C. Hall. Type in the American Museum of Natural History.

Paratypes 1, 2, 3, and 4, females, same date and locality, in the collection of G. C. Hall.

**Phyciodes tharos pascoensis**, Wright, f. ab. *nigrescens*, new.

The fulvous ground color on upper surface of wings nearly obscured by black. Fore wing possesses an antimarginal row of fulvous spots and several near base. Hind wing has antimarginal row of fulvous blotches, most of which contain small black spots. Several basal spots are also present.

Type, female, taken at Taft, B. C., on July 29, 1921 by G. C. Hall. Type in American Museum of Natural History.

**Heodes epixanthe phædrus**, new subspecies.

MALE: Upper surface of wings much like *epixanthe*. Under surface lighter color, especially that of the hind wing which is a pearl gray, differing from that of *epixanthe* in which the color has an ochreous tinge. The spots on the hind wing are smaller and the marginal orange band near the anal angle is much reduced in size.

*Epixanthe* was described by Boisduval and LeConte from two specimens taken in New Harmony, Indiana. The specimens from central New Jersey and Massachusetts compare with their description.

Type, male, from Dublin Shore, Lunenburg Co., N. S. It is in the American Museum of Natural History.

Paratype, male, same locality. In the collection of G. C. Hall.

Paratype No. 2 from Crabbes, South-western Newfoundland. Taken by G. C. Hall and in his collection.

**Euphydryas gilletti** Barnes.

I believe this fine *Euphydryas* has never before been figured and I take this opportunity to show the upper surfaces of the male and female (Figs. 4 and 5). The specimens were taken the latter part of June, 1923, near Pinedale, Wyoming, and were found plentifully in the irrigated grass meadows at an elevation of 7,500 feet. Evidently the dates of emergence are from about the middle of June to the first part of July.

## EXPLANATION OF PLATE XII.

- Fig. 1, *Aglais j-album watsoni*, ventral surface, male.
- Fig. 2, *Cercyonis alope ino*, ventral surface, male.
- Fig. 3, *Cercyonis alope ino*, ventral surface, female.
- Fig. 4, *Euphydryas gilletti*, dorsal surface, male.
- Fig. 5, *Euphydryas gilletti*, dorsal surface, female.